

Chapter 8 Test (Sections 8-2 to 8-5)**Numeric Response**

1. Find the equation of the exponential function whose graph passes through the points (0, -3) and (2, -48).

Short Answer

Evaluate the logarithmic expression.

2. $\log_9 \frac{1}{729}$

Solve the given inequality.

4. $4,096^{2n} < 512^{n+9}$

3. Solve $\log_4 0.25 + 3 \log_4 x = 5 \log_4 2 + \frac{1}{3} \log_4 64$.

5. Use $\log_2 3 \approx 1.5850$ and $\log_2 2 = 1$ to approximate the value of the expression $\log_2 2,304$.